REMARKS

Applicants respectfully request reconsideration of this application in view of the foregoing amendment and following remarks.

Status of the Claims

Claims 14-18 are pending in this application and stand rejected. By this amendment, claims 14 and 18 are amended. No new matter has been introduced by this amendment.

Rejection under 35 U.S.C. §103

Claims 14-18 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Publication No. 2001/0043275 to Hirota et al. ("Hirota") in view of U.S. Patent No. 7,046,290 to Nozaki ("Nozaki").

In *Response to Arguments* section, the Office Action describes, *inter alia*, that:

> ... Hirota teaches at least two readout modes, a normal imaging mode in which the entire image sensor area is read out and a high-speed imaging mode in which a second smaller area is read out. Since the number of pixels in the second readout mode is less than the number of pixels in the first readout mode, fewer pixels in total are mixed (i.e., the claims as currently written require 'mixing the plurality of light receiving elements less than the number of mixed pixels in the case of the first control mode', but does not necessarily require that the number of pixels which are combined into a single pixel signal be less than the number of pixels which are combined into a single pixel signal of the first mode).
>
> ... The zoom system of Nozaki reads out a full resolution image during an optical zoom operation (i.e., Figure 7, optical zoom area), and only requires a reduced resolution image during an electronic zoom operation (i.e., Figure 7, electronic zoom area). Since the scale factor is less during an optical zoom operation and greater during an electronic zoom operation of Nozaki, the combined system of Hirota in view of Nozaki meets the claim limitations as claimed. [Pages 2-3 of 07-03-2008 Office Action, emphasis added]

Claims 14 and 18 have been amended for further clarification. In particular, amended claim 14 recites, *inter alia*, that "... by mixing the plurality of light receiving elements less than the number of mixed pixels in the first control mode, thereby number of light receiving elements

combined into a single pixel signal in the second control mode is less than number of light receiving elements combined into a single pixel signal in the first control mode." Claim 18 has been amended in a similar manner to amended claim 14 discussed herein.

As Applicants explained in the previously submitted response (i.e., submitted on February 12, 2008), one of the aspects of the present invention is to provide an imaging apparatus and a controlling method thereof capable of obtaining a sufficient resolution when picture data are expanded by an electronic zoom, e.g., the imaging apparatus changes a number of pixels to be mixed in accordance with a scaling factor of the zooming.

To achieve this purpose, the controller of claim 14 has a first control mode (e.g., an optical zoom mode) and a second control mode (e.g., an electronic zoom mode). In the first control mode, the picture data is output by mixing the signals from three adjacent pixels into a single pixel signal (e.g., Fig. 5A). In the second control mode, the picture data is output either by unmixing the signals of the plurality of light receiving elements (e.g., Fig. 5C), or by mixing the signals from two adjacent pixels which is less than combining the three pixels as in the first control mode (e.g., Fig. 5B). As a result, in an electronic zoom mode control tend to have a higher scaling factor, the signals are read either by unmixing or mixing with less pixel number than the optical zoom mode thereby improving the resolution when picture data are expanded by an electronic zoom.

As the Office Action implied at least by the underlined portion as described above, neither Hirota nor Nozaki shows or suggests the inventive aspects of the present application as discussed above including "... in the second control mode, the picture data is output by unmixing the signals of the plurality of light receiving elements or by mixing the plurality of light receiving elements less than the number of mixed pixels in the first control mode, thereby

number of light receiving elements combined into a single pixel signal in the second control mode is less than number of light receiving elements combined into a single pixel signal in the first control mode." Please refer to Applicant's previous Amendments submitted on July 2, 2007 and October 24, 2007 for more detailed explanation of Hirota and Nozaki.

Accordingly, each of claims 14 and 18 as amended, and claims 15, 16 and 17 in depending from claim 14, is believed neither anticipated by nor rendered obvious in view of the cited references (i.e., Hirota and Nozaki), either taken alone or in combination, for at least the reasons discussed above.

Reconsideration and withdrawal of the rejections of claims 14-18 under 35 U.S.C. §103(a) is respectfully requested.

Applicants have chosen in the interest of expediting prosecution of this patent application to distinguish the cited document from the pending claims as set forth above. However, these statements should not be regarded in any way as admissions that the cited document is, in fact, prior art.

Applicants believe that the application as amended is in condition for allowance and such action is respectfully requested.

AUTHORIZATION

No petitions or additional fees are believed due for this amendment and/or any accompanying submissions. However, to the extent that any additional fees and/or petition is required, including a petition for extension of time, Applicants hereby petition the Commissioner to grant such petition, and hereby authorizes the Commissioner to charge any additional fees, including any fees which may be required for such petition, or credit any overpayment to Deposit Account No. 13-4500 (Order No. 1232-5096). A DUPLICATE COPY OF THIS SHEET IS ENCLOSED.

An early and favorable examination on the merits is respectfully requested.

Respectfully submitted,
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Dated: September 24, 2008

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